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E3 cond. to effect another transmission in a second format when said format change-over switch is depressed.

REMARKS

STATUS OF CLAIMS

Claims 1-17 and 20-21 were pending and stood rejected. By this Response, claims 1-2 and 11-12 have been amended. Therefore, claims 1-17 and 20-21 are now presented for consideration.

ENTRY OF AMENDMENT UNDER 37 C.F.R. § 1.116

Applicants request entry of this Rule 116 Response because the Applicants should be given a chance to respond to the newly cited reference to Rowe (U.S. Patent No. 5,479,190); the amendments of claims 1-2 and 11-12 should not entail any further search by the Examiner; and the amendments do not significantly alter the scope of the claims and place the application at least into a better form for purposes of appeal.

The Manual of Patent Examining Procedures sets forth in Section 714.12 that "any amendment that would place the case either in condition for allowance or in better form for appeal may be entered." Moreover, Section 714.13 sets forth that "the Proposed Amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified." The Manual of Patent Examining Procedures further articulates that the reason for any non-entry should be explained expressly in the Advisory Action.

DRAWING ACKNOWLEDGEMENT

No indication of the status of the drawings is provided in item 10 of the Office Action Summary. The Examiner is again asked to acknowledge the acceptability of the Drawings (FIGS. 1-2, 3A-3B, 4A-4D, 5, 6A-6D, 7-9, 10A-10D, 11-12, 13A-13C and 14-17) in the next Office Action.

REJECTION UNDER 35 USC §102(b) and 35 USC §103(a)

On pages 2-5 of the Office Action, item 3, claims 1-17 and 20-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Rowe (US Patent No. 5,479,190) in view of Siddiqui

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(US Patent No. 5,912,661).

Rowe Reference

The Examiner asserts, in the Office Action at page 2, lines 16-19, that Rowe teaches "a plurality of rotating bodies 154 that are disposed along the wheel 160 and rotating with a circumferential edge of said wheel about a first axis and the plurality of rotating bodies rotatable about a second axis (see figure 13 at 160, 154, column 8, lines 55 through column 9, lines 14)."

However, Rowe does not discuss anything related to "each of the rotating bodies having an interior thereof with raised portions and recessed portions and the wheel having projections such that the rotating bodies, while rotating around the second axis, tactily communicate responsive to the rotation thereof" (as recited in claim 1). This is because, for example, Rowe merely discloses that "[grooved s]egments 154 are slidably mounted on the band 152 and may be moved along the entire course of the band 152 ... Grooved segments 154 also may be rotated on the band 152" (see Rowe at column 8, lines 58-63), but does not disclose or suggest tactile feedback responsive to the rotation of the rotating bodies.

Siddiqui Reference

Siddiqui discloses "a computer input device with a ... wheel button type z-encoder mechanism. The wheel button is supported on an axle or spindle within the housing of the input device. The axle is supported in the housing by spaced-apart axle supports." (See Siddiqui at column 2, lines 3-8.) However, Siddiqui, does not disclose a coordinate input device, which has a plurality of rotating bodies disposed along and rotating along with a circumferential edge of said wheel about the first axis and the plurality of rotating bodies rotatable about said circumferential edge as a second axis" (see claim 1). In particular, Siddiqui does not suggest anything related to "a plurality of rotating bodies." Thus, Siddiqui cannot disclose or suggest tactile feedback responsive to the rotation of the rotating bodies.

Accordingly, it is submitted that claim 1 patentably distinguishes over the cited art for the above-mentioned reasons and should be allowable.

Claims 2 and 11-12, which include an identical recitation to that of claim 1, are submitted to be allowable for at least the same reasons as claim 1, as well as for the additional recitations therein.

Claims 3-10, 13-17 and 20-21, which depend from claims 1 and 11, are also submitted to be allowable for at least the same reasons as claims 1 and 11, as well as for the additional

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recitations therein. Reconsideration is respectfully requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that affect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters. If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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on 4/16 at 03
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By: 4/16/03
Date: 4/16/03

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VERSION WITH MARKINGS TO SHOW CHANGES MADE**IN THE CLAIMS:**

Please **AMEND** claims 1-2 and 11-12 in accordance with the following:

1. (FOUR TIMES AMENDED) A coordinate input device having a wheel which is rotatable about a first axis, comprising:

a plurality of rotating bodies disposed along and rotating along with a circumferential edge of said wheel about the first axis and the plurality of rotating bodies rotatable about said circumferential edge as a second axis, each of the rotating bodies having an interior thereof with raised portions and recessed portions and the wheel having projections such that the rotating bodies, while rotating around the second axis, tactily communicate responsive to the rotation thereof;

rotating body rotating state detection means for detecting a rotating state of said rotating bodies;

wheel rotating state detection means for detecting a rotating state of said wheel;

a format change-over switch; and

data transmission means for transmitting information detected by each of said respective detection means as a set of operation instructions for a computer and adapted to effect transmission in a first format when said format change-over switch is not depressed and to effect another transmission in a second format when said format change-over switch is depressed.

2. (FOUR TIMES AMENDED) A coordinate input device having a wheel which is rotatable about a first axis, comprising:

a plurality of rotating bodies disposed along and rotating along with a circumferential edge of said wheel about the first axis and the plurality of rotating bodies rotatable about said circumferential edge as a second axis, each of the rotating bodies having an interior thereof with raised portions and recessed portions and the wheel having projections such that the rotating bodies, while rotating around the second axis, tactily communicate responsive to the rotation thereof;

ball moving state detection means for detecting a moving state of a ball;

click switch operating state detection means for detecting an operating state of a click switch;

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wheel rotating state detection means for detecting a rotating state of said wheel;
a format change-over switch; and

data transmission means for transmitting respective pieces of information detected by said respective detection means as a set of operation instructions for a computer and adapted to effect transmission in a first format when said format change-over switch is not depressed and to effect another transmission in a second format when said format change-over switch is depressed.

3. (AS TWICE AMENDED) The coordinate input device as set forth in claim 1, wherein said coordinate input device has a left click switch as a first switch and a right click switch as a second switch, said coordinate input device further comprising:
a third switch disposed as a lower portion of said wheel;
a wheel support portion having a construction to support said wheel and to allow said wheel to slide and adapted to drive said third switch by depressing said wheel downwardly; and
third switch operating state detection means for detecting the operating state of said third switch.

4. (AS TWICE AMENDED) The coordinate input device as set forth in claim 3, wherein
said wheel support portion further comprises a ratchet construction on a side of said wheel, and wherein
said wheel is adapted to fit in said ratchet construction.

5. (AS TWICE AMENDED) The coordinate input device as set forth in claim 1, wherein
an inner wall at a center of said respective rotating bodies through which said circumferential edge is put has a locking construction, and wherein
said circumferential edge is adapted to fit in a second locking construction.

6. (AS TWICE AMENDED) The coordinate input device as set forth in claim 1, wherein said rotating body is of a cylindrical configuration.

7. (AS TWICE AMENDED) The coordinate input device as set forth in claim 1,

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wherein said rotating body is of a spherical configuration.

8. (AS TWICE AMENDED) The coordinate input device as set forth in claim 1, wherein a surface of said rotating bodies is covered with a slip preventive material.

9. (AS TWICE AMENDED) The coordinate input device as set forth in claim 1, wherein a recess is formed in a surface of said rotating bodies.

10. (AS TWICE AMENDED) The coordinate input device as set forth in claim 1, wherein said coordinate input device further comprises:

ball moving state detection means for detecting a moving state of a ball; and

click switch operating state detection means for detecting an operating state of a click switch.

11. (FOUR TIMES AMENDED) A coordinate input device having a wheel which is rotatable about a first axis, comprising:

a plurality of rotating bodies disposed along and rotating along with a circumferential edge of said wheel about the first axis and the plurality of rotating bodies rotatable about said circumferential edge as a second axis, each of the rotating bodies having an interior thereof with raised portions and recessed portions and the wheel having projections such that the rotating bodies, while rotating around the second axis, tactily communicate responsive to the rotation thereof;

rotating body rotating state detection means for detecting a rotating state of said rotating bodies;

a wheel rotating state detection unit detecting a rotating state of said wheel;

a format change-over switch; and

a data transmission unit transmitting information detected by each of said respective detection units as a set of operation instructions for a computer and adapted to effect transmission in a first format when said format change-over switch is not depressed and to effect another transmission in a second format when said format change-over switch is depressed.

12. (FOUR TIMES AMENDED) A coordinate input device having a wheel which is

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rotatable about a first axis, comprising:

a plurality of rotating bodies disposed along and rotating along with a circumferential edge of said wheel about the first axis and the plurality of rotating bodies rotatable about said circumferential edge as a second axis, each of the rotating bodies having an interior thereof with raised portions and recessed portions and the wheel having projections such that the rotating bodies, while rotating around the second axis, tactilely communicate responsive to the rotation thereof;

a rotating body rotating state detection unit detecting a rotating state of said rotating bodies;

a ball moving state detection unit detecting a moving state of a ball;

a click switch operating state detection unit detecting an operating state of a click switch;

a wheel rotating state detection unit detecting a rotating state of said wheel;

a format change-over switch; and

a data transmission unit transmitting respective pieces of information detected by said respective detection units as a set of operation instructions for a computer and adapted to effect transmission in a first format when said format change-over switch is not depressed and to effect another transmission in a second format when said format change-over switch is depressed.

13. (AS TWICE AMENDED) The coordinate input device as set forth in claim 11, wherein said coordinate input device has a left click switch as a first switch and a right click switch as a second switch, said coordinate input device further comprising:

a third switch disposed as a lower portion of said wheel;

a wheel support portion to support said wheel and to allow said wheel to slide and adapted to drive said third switch by depressing said wheel downwardly; and

a third switch operating state detection unit detecting the operating state of said third switch.

14. (AS TWICE AMENDED) The coordinate input device as set forth in claim 13, wherein said wheel support portion further comprises a ratchet construction on a side of said wheel, and wherein said wheel is adapted to fit in said ratchet construction.

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15. (AS TWICE AMENDED) The coordinate input device as set forth in claim 11, wherein an inner wall at a center of said respective rotating bodies through which said circumferential edge is put has a locking construction, and wherein said circumferential edge is adapted to fit in a second locking construction.

16. (AS TWICE AMENDED) The coordinate input device as set forth in claim 11, wherein said rotating body is of a cylindrical configuration.

17. (AS TWICE AMENDED) The coordinate input device as set forth in claim 11, wherein said rotating body is of a spherical configuration.

20. (AS ONCE AMENDED) The coordinate input device as set forth in claim 11, wherein a surface of said rotating bodies is covered with a slip preventive material.

21. (AS ONCE AMENDED) The coordinate input device as set forth in claim 11, wherein a recess is formed in a surface of said rotating bodies.